

# [Good quantitative research method in finance critical thinking example](https://assignbuster.com/good-quantitative-research-method-in-finance-critical-thinking-example/)

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## Stationarity of a series

These are where the mean, variance and autocorrelation structures in a model do not change over time. It is a stochastic process whose joint distribution in probability does not change even when shifted in time. The statistical properties do not change over time. It shows that the degrees of expectation, third order and the variance do not change in the process of estimation.

## Benefits of stationarity of a series

Stationarity a series has several benefits. To begin with, the study of behavior for a certain period under consideration is made easy due to the consistency in the model. In the forecasting of the expected results are more likely to be the actual because the series is stationary. It helps in giving a correct relationship of the two or more variables in the model, which is then translated, to the actual life situation.
The second importance of the stationary series is the estimation of the series analysis. Stationary series has a steady estimate throughout in the entire period. In statistic, it is good to have interesting theoretical quantities that can be estimated. Thus, selection of the estimate depends on the state at which one is facing at the moment.
In the regression, the variable can be proved that the standard assumption for asymptotic analysis will be valid in the stationary time series. The t-ratio will follow the t-distribution, therefore; hypothesis test can be valid on the regression parameters . In conclusion, the stationarity of a series is used in prediction and forecasting, in the finance related field. Therefore, it is vital in the decision making and modeling of variables in business.

## Works Cited

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